



(12) **United States Patent**
Etzkorn et al.

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(54) **EYE-MOUNTABLE DEVICES AND METHODS FOR ACCURATELY PLACING A FLEXIBLE RING CONTAINING ELECTRONICS IN EYE-MOUNTABLE DEVICES**

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(57) **ABSTRACT**

Example eye-mountable devices and methods for placing a flexible ring containing electronics in an eye-mountable device are described. A method may involve forming a first polymer layer, which defines a posterior side of an eye-mountable device. Further, the method may involve positioning a ring-shaped structure on the first polymer layer in a predetermined rotational orientation, wherein the ring-shaped structure comprises a sensor configured to detect an analyte. Still further, the method may involve forming a second polymer layer over the first polymer layer and the ring-shaped structure, such that the ring-shaped structure is fully enclosed by the first polymer layer and the second polymer layer. The second polymer layer defines an anterior side of the eye-mountable device. The method may also involve forming a channel through the second polymer layer based on the predetermined rotational orientation, such that the sensor is configured to receive the analyte via the channel.

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CPC **A61B 5/00** (2013.01); **B29D 11/00038** (2013.01); **B29D 11/00807** (2013.01); **G02C 7/04** (2013.01)

(58) **Field of Classification Search**
CPC A61B 5/6821; B29D 11/00038; B29D 11/00807; G02C 7/04

See application file for complete search history.

18 Claims, 15 Drawing Sheets

